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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,612	04/08/2004	Richard A. Sader	200312128-1	8658

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HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/820,612

Applicant(s)

SADER ET AL.

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-12,14,15,17-19 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-12,14,15,17-19 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. All outstanding rejections except for those described below are overcome by applicants' amendment filed 9/14/06.

The new grounds of rejection set forth below are necessitated by applicants' amendment and thus, the following action is final. Specifically, given that claims 12 and 14 have each been amended to recite "fixer fluid" and claims 19-24 have been amended to change "amphoteric phosphate ester" to "phosphate ester" in addition to the recitation of specific phosphate ester, claims 12, 14, and 19-24 are now rejected by Ma et al. (U.S. 2004/006380) in combination with Sader et al. (U.S. 6,610,129).

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 4-6, 15, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Kruckel (U.S. 2004/0206274).

The rejection is adequately set forth in paragraph 5 of the office action filed 5/18/06 and is incorporated here by reference.

4. Claims 1, 5, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Buckman et al. (U.S. 4,176,107).

The rejection is adequately set forth in paragraph 6 of the office action filed 5/18/06 and is incorporated here by reference.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1, 3-10, 12, 14-15, 17-19, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. (U.S. 2004/0063808) in view of Sader et al. (U.S. 6,610,129)

The rejection is adequately set forth in paragraph 12 of the office action filed 5/18/06 and is incorporated here by reference.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. in view of Sader et al. as applied to claims 1, 3-10, 12, 14-15, 17-19, and 21-24 above, and further in view of Hermansky (U.S. 2005/0155516).

The rejection is adequately set forth in paragraph 13 of the office action filed 5/18/06 and is incorporated here by reference.

Response to Arguments

8. Applicants' arguments regarding Momose et al. (U.S. 6,749,675), EP 499425, Tomioka et al. (U.S. 2003/0103121), and Suzuki et al. (U.S. 4,579,591) have been fully considered but

Art Unit: 1714

they are moot in view of the discontinuation of the use of these references against the present claims.

9. Applicants' arguments filed 9/14/06 have been fully considered but, with the exception of arguments relating to Momose et al., EP 499425, Tomioka et al., and Suzuki et al., they are not persuasive.

Specifically, applicants argue that Kruckel and Buckman et al. are not proper anticipatory references against the present claims given that there is no disclosure in either reference of "fixer fluid" as presently claimed. Contrary to examiner's arguments set forth in paragraph 7 of the office action mailed 5/18/06, applicants argue that the recitation of "fixer fluid" is necessary to give life, meaning, and vitality to the claims.

However, as set forth in paragraph 6 of the present specification, "fixer fluid" is defined as a fluid that is substantially devoid of color and includes a reactive component that reacts with a component of ink jet ink.

Given that each of Kruckel and Buckman et al. disclose composition substantially devoid of color that includes reactive component, i.e. cationic polymer, that would react with component of ink jet ink, it is clear that while each of Kruckel and Buckman do not explicitly refer to their composition as a "fixer fluid", each reference disclose composition that meets applicants definition of "fixer fluid".

Thus, it is the examiner's position that the purpose or intended use, i.e. fixer fluid, recited in the present claims does not result in a structure difference between the presently claimed invention and the invention of either Kruckel or Buckman and further that the composition of

Art Unit: 1714

Kruckel or Buckman et al., which each contain phosphate ester and cationic polymer identical to that presently claimed, is capable of performing the recited purpose or intended use.

Applicants also argue that there is no disclosure in Kruckel or Buckman et al. that the composition would possess reduced kogation and that the phosphate ester would not precipitate with the cationic polymer and that the examiner has presented no facts or reasoning as to why the composition of Kruckel or Buckman et al. would necessarily inherently possess reduced kogation or why the phosphate ester would necessarily inherently not precipitate with the cationic polymer.

However, it is the examiner's position that the composition of Kruckel or Buckman et al. would possess reduced kogation given that each of Kruckel and Buckman et al. disclose composition comprising phosphate ester identical to that presently claimed. Further, given that Kruckel and Buckman et al. disclose cationic polymer identical to that presently claimed, it is clear that such phosphate ester and cationic polymer would inherently not precipitate. With respect to the precipitation, it is further noted that paragraph 23 of the present specification discloses that it is the presence of at least one mole of ethylene oxide in the phosphate ester that prevents precipitation with the cationic polymer. Given that Kruckel and Buckman et al. each disclose phosphate ester with ethylene oxide groups, it is clear that such phosphate ester would necessarily inherently not precipitate with the cationic polymer.

Applicants argue that there is no motivation to combine the fixer fluid of Ma et al. with the ink jet ink of Sader et al.

Art Unit: 1714

However, the fixer fluid of Ma et al. is also utilized in ink jet printer as is the ink of Sader et al. and Sader et al. teaches the use of phosphate ester for fogging resistance and improvement in the rate of resistor failure of ink jet printer which would also be significant to the fixer fluid of Ma et al.

Applicants also argue that knowledge in the art teaches away from combining Ma et al. with Sader et al. and point to paragraph 8 of the present specification that recites that many of the additives that would have been used to improve the fogging of ink jet inks are not compatible with fixer fluids because the additives are anionic and therefore may precipitate with the cationic polymer.

While paragraph 8 discloses that “many” of the anionic additives in ink jet inks are not compatible with fixer fluids and “may” form precipitate with cationic polymer, there is no disclosure in the present specification that no anionic additives can be used in fixer fluids. Rather, this portion of the present specification discloses that anionic additives of ink jet inks that precipitate with cationic polymer are not compatible with fixer fluids. However, given that Sader et al. disclose phosphate ester of the formula $(RE_x)_yPO_{4-y}H_{3-y}$, where R is hydrocarbon group of at least 8 carbons, E is ethoxy group, x is greater than 0, and y is 1-3, which is utilized for anti-fogging and contains ethylene oxide groups, the presence of which as set forth in the present specification prevents precipitation with cationic polymer, it would have been obvious to one of ordinary skill in the art that the phosphate ester of Sader et al. would intrinsically not precipitate with the cationic polymer of Ma et al.

In light of the above, it is the examiner's position that the combination of Ma et al. with Sader et al. remains relevant against the present claims.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1714

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
11/26/06